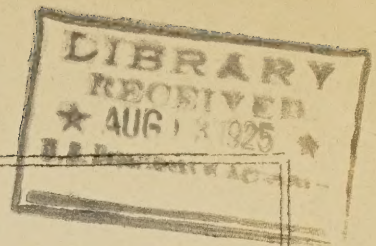


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THE EFFECTIVENESS OF EXTENSION IN REACHING RURAL PEOPLE

A STUDY OF 1,415 FARMS IN
STANISLAUS AND BUTTE COUNTIES, CALIF., 1924

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*The term "farm" as used in this circular refers to the farm and home as an economic unit and to the various individuals comprising the operator's family.

Purpose and Nature of Study

The extension study described in this circular was conducted for the purpose of determining the extent to which farmers and farm women are accepting the improved methods taught by the extension service. Personal calls were made by a representative of the Office of Cooperative Extension Work or of the Agricultural Extension Service of the University of California to every farm located in the areas selected and information obtained regarding changes in both farm and home practices that might be credited to extension. In addition to listing improved practices adopted on the farm or in the home as the result of extension effort, information was also obtained relative to the means and agencies employed in extension work that had in any way been instrumental in bringing about the acceptance of these practices. (Fig. 1.) Only actual farms were included in the study, no information being included from people living in villages or in the open country who did not operate farms.

FARM AND HOME SURVEY OF THE RESULTS OF EXTENSION WORK

Community _____ Farm No. _____ Date _____ Renter _____ Owner _____ Phone _____
 Name _____ Address _____ Size of farm _____
 Years: On farms in County _____ On this farm _____
 Type of farming _____ Irrig. _____ Non-Irrig. _____ Kind of Road _____
 Number in family: Adults _____ Juniors' _____ Ages _____ Miles to agent's office _____
 Member F. B. (Pres.) _____ (past) _____ Registrant F.H.D. (pres.) _____ (past) _____
 Connection with extension work _____
 Member what farmers' cooperative ass'ns _____ Other Farmers Ass'ns _____
 Extension activities on Ranch _____
 In home _____
 Other ext. activities attended or participated in _____
 Contacts with Co. Agt. _____ H. D. Agt. _____
 Club Agt. _____ Proj. leaders or Com't'men _____
 What specialists _____

Farm and home practices adopted	Methods largely responsible (See list below)	Extension Agts. involved			
		C.A.	H.D.A.	Club A	Spec'l

Abbreviations:- Correspondence (cor.), Office calls (o.c.), Telephone calls (tel.), Farm visits (F.V.) Study courses (st.c.), Leader training (l.tr.) --Bulletins (bul.), Circular letters (cir.l.) Meetings (mtg.), News service (n.s.), Extension schools (e.s.)--Demonstrations: Adult (dem.a.), Junior (dem.Jr.)--Indirect contacts (ind.)

Fig. 1 (a) Obverse side of questionnaire card used in collecting data.

List below names of members of family who have carried on a junior project			
Name	Present age	Years in work	Project
a.			
b.			
c.			

Training after club work	Present occupation	Present contact with extension work	Standing in community
a.			
b.			
c.			

How has your community benefited through agricultural and home economics extension work? _____

What other projects promoted by Extension Service have benefited your community? _____

Suggestions for the improvement of the service: _____

Attitude toward extension work _____

If not a F.B. or F.H.D. member, do you feel free to attend extension meetings? _____

Why was membership in F.B. or F.H.D. discontinued? _____

Extension Services of the California State College of Agriculture and of the United States Department of Agriculture cooperating.

Fig. 1 (b).- Reverse side of questionnaire card used in collecting data.

Areas Included in Study

Stanislaus and Butte Counties were selected for the study. Extension work in these counties had been under way several years. Both employed a home demonstration agent as well as an agricultural agent. The work had not been interrupted recently by changes in agents. The Stanislaus area comprising a block of approximately 36 square miles in the center of the county is located in the oldest irrigated section of the State. The chief agricultural crops are peaches, grapes, beans, and melons. Dairying is an important industry on many farms. The Butte County area including the entire southeastern half of the county represents a newer agricultural section of the State. Apples, oranges, olives, peaches and rice are the chief crops. A few beef cattle and sheep ranches are also located in this area. A small proportion of the farms in both areas were being operated by "foreigners," mostly Portuguese, engaged in dairying.

Brief History of Extension in Areas

Stanislaus County has cooperated with the Agricultural Extension Service of the University of California in the employment of extension agents since 1915. C. M. Conner was the agricultural agent from 1915 to 1917 when he was

succeeded by the present county agent, A. A. Jungermann. Hope Baxter was employed as home demonstration agent in 1921, being succeeded by the present agent, Margaret Todt, in 1923. Two assistant agricultural agents are employed in this county.

W. L. Sweet, the first county agent in Butte County, was employed in 1918. He was succeeded by the present county agent, H. E. Drobish, in 1919. Constance Douglas has been employed as home demonstration agent since 1922. One assistant agricultural agent is employed in this county.

As in other California Counties, the farm bureau has been the farmers' organization in Stanislaus and Butte Counties with which the State Extension Service has cooperated in forwarding the extension program for the county.

General Information Relating to Farms Included in Study

A total of 1,415 farm and home records were obtained, 749 in Stanislaus County and 666 in Butte County. These 1,415 farms are 89.4 per cent of all the farms located in the areas covered. The remaining 10.6 per cent of farms were visited, in some cases several times, without finding anyone at home. Less than 13 per cent of all farms studied were operated by tenants. (Table 1.)

Table 1.- General information relating to farms included in study

Item	All farms		Stanislaus		Butte	
	Number	Per- cent- age	Number	Per- cent- age	Number	Per- cent- age
Total number farms in areas-----	1,583		846		737	
Farm and home records obtained-----	1,415	89.4	749	88.5	666	90.4
Farms operated by owners -----	1,233	87.1	632	84.4	601	90.2
Farms operated by tenants -----	182	12.8	117	15.6	65	9.8
Farms with telephones -----	425	30.0	197	26.3	228	34.2
Average number of years on farm in county -----	12		11.4		13.2	
Average number of years on this farm	9		8.2		10.5	
Farms irrigated -----	1,303	92.1	734	98.0	569	85.4
Farms not irrigated -----	112	7.9	15	2.0	97	14.6
Average size (acres) -----	83		38.5		133	
Located on improved roads -----	810	57.2	444	59.3	366	55.0
Located on unimproved roads -----	605	42.8	305	40.7	300	45.0
Average number of adults per farm --	2.2		2.2		2.2	
Farms with children -----	868	61.3	490	65.4	378	56.8
Average number of children on such farms -----	2.4		2.3		2.5	
Distance to extension office (miles)	9.6		6.1		13.6	

Thirty per cent of the homes had telephones. The average tenure of farm operators on the farms they were operating was 9 years. Ninety-two per cent of the farms were irrigated, the average size of all farms being 83 acres.

Fifty-seven per cent were located on improved roads (concrete, macadam or gravel). The average distance to the county extension office was 9.6 miles. There were on the average 2.2 adults in the farm operator's family. Sixty-one per cent of the families had children under 21 years of age living at home. The average number of children in these families was 2.4.

Participation in Extension

Of the 1,415 farm operators interviewed, 29 per cent were members of the farm bureau. (Table 2.) An additional 16 per cent had been members but had dropped out. Eighteen per cent of the farm women were members of the farm bureau with 3 per cent additional listed as former members. The farmer or some member of his family was either serving or had at some previous time served as a project leader or committeeman in the case of 10 per cent of the farms.

Table 2. - Participation in extension

Item	All farms		Stanislaus		Butte	
	Number	Per- cent- age	Number	Per- cent- age	Number	Per- cent- age
Farm and home records obtained-----	1,415		749		666	
Members of farm bureau (present)-----	407	28.8	188	25.1	219	32.9
Members of farm bureau (former)-----	226	16.0	122	16.3	104	15.6
Members of farm-home department (present)-----	262	18.5	104	13.9	158	23.7
Members of farm-home department (former)-----	42	3.0	11	1.5	31	4.6
Farms represented by committeemen or local leaders-----	141	10.0	59	7.9	82	12.3
Farms on which extension activities were conducted-----	161	11.4	72	9.6	89	13.4
Homes in which extension activities were conducted -----	60	4.2	24	3.2	36	5.4
Farms represented in other extension activities -----	909	64.2	463	61.8	446	67.0
Farms with boys and girls in club work	60	4.2	17	2.3	43	6.4

Extension activities such as demonstration meetings, stops on auto tours and the like had been held on 11 per cent of the farms and in 4 per cent of the homes. Extension activities on neighboring farms or at community centers had been attended by representatives of 64 per cent of the farms. Boys and Girls from 4 per cent of the farms either were enrolled in club work or had been previously.

Contact with Extension Forces

As the result of farm and home visits, office calls, correspondence, attendance at meetings and similar extension activities, representatives of 71 per cent of the farms studied had been in touch with some member of the extension service staff. (Table 3.) Contact with the county agricultural agent was reported by 67 per cent of the farms. In the case of 30 per cent of the homes, some member of the family had been in touch with the home demonstration agent. The subject matter specialists who came to the county to assist with the local extension program had made contacts with representatives of 27 per cent of the farms.

Table 3. - Contact with extension forces

Item	All farms		Stanislaus		Butte	
	Number	Per- cent- age	Number	Per- cent- age	Number	Per- cent- age
Farms reporting contact with some member of the extension service-	1,010	71.4	527	70.4	483	72.5
Farms reporting contact with county agent-----	951	67.2	496	66.2	455	68.3
Farms reporting contact with home demonstration agent-----	431	30.4	195	26.0	236	35.4
Farms reporting contact with specialists -----	378	26.7	216	28.8	162	24.3

Membership in Cooperative Associations

The leading cooperative associations in the areas studied from the standpoint of number of members were the peach and fig, the raisin, the grape, and the milk producers' associations. (Table 4.) Other important associations were the Farmers' Union, the apricot and prune, and the canning peach associations.

Farms and Homes Reached by Extension

The effectiveness of extension teaching may be measured by the acceptance of the improved farm and home practices taught. According to the information furnished by the farmer and his wife, one or more farm or home practices had been changed on 64 per cent of the farms. An average of 3.2 practices had been changed on these 902 farms. (Table 5.) In the case of agricultural practices 58 per cent of the farms reported an average of 2.4 new practices adopted. Twenty-four per cent of the farms reported the adoption of 2.8 home economics practices per home.

Methods and Agencies which Influenced Farming People to Change Practices

If the farmer stated that he was pruning his orchard according to the advice of the Extension Service, or if the farm woman was using her guide pattern made on the gummed paper dress form, an effort was made to determine

Table 4. - Membership in cooperative associations

Name of association	All farms		Stanislaus		Butte	
	Number	Per- cent- age	Number	Per- cent- age	Number	Per- cent- age
Peach and fig-----	155	18.3	102	22.0	53	13.8
Raisin and grape-----	155	18.3	152	32.8	3	.8
Milk-producers' association----	125	14.8	88	19.0	37	9.7
Farmers' union-----	78	9.2	15	3.2	63	16.4
Prune and apricot-----	72	8.5	16	3.5	56	14.6
Canning-peach association-----	72	8.5	29	6.3	43	11.2
Nut associations-----	43	5.1	17	3.7	26	6.8
Fruit-growers' association----	36	4.3	4	.9	32	8.4
Rice association-----	33	3.9	-	-	33	8.6
Poultry-producers' association----	20	2.4	18	3.9	2	.5
Fruit exchange-----	19	2.3	8	1.7	11	2.9
Bean association-----	14	1.6	5	1.1	9	2.4
Miscellaneous associations-----	7	.8	3	.6	4	1.0
Sweet-potato association-----	6	.7	6	1.3	-	-
Cattle association-----	6	.7	-	-	6	1.6
Olive association-----	5	.6	-	-	5	1.3

Table 5. - Farms and homes changing practices

Item	All farms		Stanislaus		Butte	
	Number	Per- cent- age	Number	Per- cent- age	Number	Per- cent- age
Farm and home records obtained----	1,415	100	749	100	666	100
Farms on which some practice had been changed-----	902	63.7	500	66.8	402	60.4
Average number practices changed----	3.2	--	3.1	--	3.4	--
Farms on which agricultural prac- tices had been changed-----	822	58.1	474	63.3	348	52.2
Average number agricultural prac- tices changed-----	2.4	--	2.3	--	2.5	--
Homes in which home-economics practices had been changed-----	344	24.3	168	22.4	176	26.4
Average number home practices changed-----	2.8	--	2.6	--	2.9	--

what means and agencies employed in extension teaching had in any way been responsible for the adoption of the practice. In some cases, the methods influencing the change in practice were quite definite and clear cut, while in others the adoption of the practice was due to the cumulative affect of several

methods. In a few cases, the original method or methods influencing the change were so remote as to be impossible of identification.

The means and agencies employed in extension have been classified into three groups for purposes of this study:

- (1) The propaganda group including general meetings, bulletins, circular letters, publicity articles and the like,
- (2) Personal service group including farm and home visits, office calls, correspondence and the like, and
- (3) The object lesson group including adult and junior demonstrations.

Of the 902 farms adopting improved practices, 80 per cent cited methods in the object lesson group, 83 per cent methods falling in the propaganda group, and 32 per cent methods belonging to the personal service group. (Table 6.) Twenty-one per cent of the farms reporting changed practices mentioned influences which could not be credited directly to any of the groups of methods given above.

Table 6. - Methods and agencies which influenced farms to change practices

Item	All farms		Stanislaus		Butte	
	Number	Per- cent- age	Number	Per- cent- age	Number	Per- cent- age
Farms on which some practice had been changed-----	902	100	500	100	402	100
Farms influenced by:						
Propaganda methods-----	747	82.8	413	82.6	334	83.1
Personal-service methods----	292	32.4	181	36.2	111	27.6
Object-lesson methods-----	718	79.6	390	78.0	328	81.6
Indirect influences-----	186	20.6	118	23.6	68	16.9
Farms influenced by:						
County agent-----	766	84.9	434	86.8	332	82.6
Home demonstration agent----	331	36.7	161	32.2	170	42.3
Subject-matter specialists--	303	33.6	185	37.0	118	29.4

Eighty-five per cent of the farms reached gave some credit to the county agent, 37 per cent mentioned the home demonstration agent and 34 per cent reported the influence of subject-matter specialists.

It will be noted that one farm may have reported the influence of more than one extension method and more than one extension agent.

Practices Changed and Influences Responsible

The 902 farms effectively reached by extension reported a total of 2,921 different farm and home practices adopted, of which 1,970 related to agriculture and 951 to home economics. In so far as it was possible to obtain the information, the methods responsible and the extension agents involved were reported for each practice adopted. (Table 7.) The groups of methods maintain about the same relationship to each other as in the case of farms reached above. Propaganda methods were reported in connection with 73 per cent of all practices adopted, object lesson methods with 73 per cent and personal service methods with 18 per cent. Indirect influences were reported as having affected 8 per cent of the changed practices. The county agent was mentioned in connection with 61 per cent of the practices, the home demonstration agent with 32 per cent and the subject matter specialists with 18 per cent.

Table 7. - Practices changed and influences responsible

Item	All farms		Stanislaus		Butte	
	Number	Per- cent- age	Number	Per- cent- age	Number	Per- cent- age
Farm and home practices changed----	2,921	100	1,538	100	1,383	100
Agricultural practices changed----	1,970		1,106		864	
Home-economics practices changed----	951		432		519	
Practices influenced by:						
Propaganda methods-----	2,283	78.2	1,147	74.6	1,136	82.1
Personal-service methods-----	538	18.4	347	22.6	191	13.8
Object-lesson methods-----	2,131	73.0	1,022	67.1	1,099	79.5
Indirect influences-----	246	8.4	163	10.6	87	6.3
Practices influenced by:						
County agent-----	1,775	60.8	971	63.1	804	58.1
Home demonstration agent-----	925	31.7	419	27.2	506	36.6
Subject-matter specialist-----	531	18.2	336	21.8	195	14.1

The relative frequency with which the individual methods were reported is shown in Table 8. The adult demonstration and the meeting head the list with 73 per cent and 72 per cent of the practices respectively. The close relationship between these two methods is largely due to the emphasis placed upon method and result demonstration meetings in both counties. Farm and home visits were reported in connection with 12 per cent of the practices and office calls in connection with 5 per cent. The other extension methods have apparently been little stressed by extension workers in these two counties.

Table 8. - Relative Frequency with which extension methods were reported

Method	Percentage of total practices changed		
	All farms	Stanislaus	Butte
Adult demonstrations-----	72.9	67.0	79.5
Meetings-----	72.3	67.1	78.2
Farm visits-----	12.0	15.3	8.4
Indirect-----	8.6	10.6	6.3
Office calls-----	5.0	6.5	3.2
Bulletins-----	4.3	5.2	3.4
News service-----	3.6	5.3	1.7
Extension schools-----	1.2	.8	1.5
Leader training-----	.8	1.0	.6
Correspondence-----	.6	.8	.4
Junior demonstrations-----	.4	.3	.6
Telephone-----	.3	.6	--
Study courses-----	.1	--	.2
Circular letter-----	---	--	--

A list of the detailed practices reported adopted on at least two per cent of the farms is given in Table 9. The full list contains 74 headings in the agricultural and 21 in the home-economics group, indicating the especially wide range of agricultural problems in the areas studied. The pruning of trees and vines, poultry culling and the use of irrigation water head the agricultural group. In the home-economics group, dress forms, millinery, general sewing, and canning head the list.

Other Factors Influencing the Adoption of Practices

The foregoing discussion has been related to the extension means and agencies which have influenced farmers and home makers to accept improved practices. There are other factors such as condition of land occupancy, size of farm, membership in extension activities, and the like which doubtless have had an influence also.

Condition of land occupancy. - The farm operator was the owner in the case of 87 per cent of the farms. Of the owner-operator group, 68 per cent put into practice teachings of the extension service. Sixty-two per cent adopted agricultural practices and 26 per cent adopted home practices. (Table 10.) In the tenant-operator group, 37 per cent had adopted some practice, 30 per cent agricultural practices, and 15 per cent home practices. Making allowance for the fact that 25 per cent of the tenants were "foreigners" as compared to 9 per cent of the owners, the advantages of land ownership are still quite marked in connection with the spread of both agricultural and home economics practices.

Table 9. - Improved practices adopted by 2 per cent or more of the farms and homes

Practices	Percentage of total farms reporting		
	Entire area	Stanislaus	Butte
<u>Agricultural practices</u>			
Pruning trees-----	32.3	32.8	31.7
Pruning vines-----	13.4	21.0	4.8
Poultry culling-----	8.8	7.3	10.4
Irrigation-----	8.0	9.7	6.0
Orchard spraying-----	4.7	5.5	3.8
Alfalfa-----	4.0	7.3	.3
Cover crops-----	4.3	3.2	5.6
Grape trellising-----	4.2	7.1	.9
Fertilizers-----	4.0	2.1	6.2
Tree wiring-----	4.0	1.6	6.6
Animal pests-----	3.7	.7	7.0
Orchard thinning-----	3.1	1.6	4.8
Soil improvement (general)----	3.1	2.4	3.9
Septic tanks-----	2.8	2.4	3.3
Orchard planting-----	2.5	.3	5.0
Tractors-----	2.4	1.2	3.8
Insect pests-----	2.1	3.3	.8
Poultry feeding-----	2.0	2.7	1.4
<u>Home-economics practices</u>			
Dress forms-----	13.7	11.5	16.2
Millinery-----	11.9	8.9	15.3
Clothing (general)-----	9.9	8.5	11.4
Canning-----	6.3	5.9	6.8
Renovating and remodeling clothing-----	3.4	3.4	3.4
Nutrition-----	3.3	5.6	.8
Food preservation (general)----	3.1	1.3	5.1
Guide patterns-----	2.8	1.2	4.6
Drying-----	2.3	2.0	2.7
Jelly making-----	2.1	1.6	2.7

Table 10. - Condition of land occupancy as related to number of farms changing practices

Group	Number of farms	Percent- age of all farms	Average size	Percent of farms changing practices			Average number of practices changed
				Agri- culture	Home Eco- nomics	Any prac- tice	
Owners-----	1,233	87	<u>Acres</u> 75	62	26	68	3.3
Tenants-----	182	13	138	30	15	37	2.3

Nationality. - One hundred fifty-six of the 1,415 farms studied were operated by "foreigners" by far the most of whom were Portuguese. Only 18 per cent of the farms in this group reported changed practices as compared to 69 per cent of other farms.

Size of farm. - The division of farms into four size groups according to acreage has been made in Table 11. The percentage of farms reporting the adoption of improved practices is practically the same in all four groups. The average number of practices changed per farm reached increases only slightly with increased acreage. Apparently the very small and the very large farms are being reached to about the same extent as the medium-sized farms.

Table 11.- Relation of size of farm to number of farms changing practices

Acres	Number of farms	Average size	Percent of farms changing practices			Average number of practices changed
			Agri-culture	Home Economics	Any practice	
		<u>Acres</u>				
Under 20 -----	390	11	57	22	64	2.9
20-40 -----	607	28	60	24	65	3.3
41-80 -----	194	60	60	25	64	3.2
Over 80 -----	224	380	53	29	60	3.6

Distance from extension office. - Is the farm located at a distance from the county extension office being reached as effectively as the farm but a few miles away? This question is answered in Table 12. Within the range of distance involved in the areas studied, there is little if any apparent relationship between distance from the county extension office and percentage of farms reached.

Table 12.- Relation of distance from extension office to farms changing practices

Group	Number of farms	Average distance	Percentage of farms changing practices			Average number of practices changed
			Agri-culture	Home Economics	Any practice	
		<u>Miles</u>				
Under 10 miles----	814	5.2	62	23	66	3.1
10 - 19 miles----	520	14.5	52	27	59	3.5
20 miles and over-	81	21.9	62	25	68	3.0

Nature of roads. - Fifty-seven per cent of the farms in the areas studied were located on improved roads (concrete, macadam or gravel). (Table 13.) Sixty-five per cent of this group adopted improved practices as compared to 62 per cent of the farms located on unimproved roads. This difference is so slight, however, as to be of little if any importance. The extension service is reaching those located on back roads as well as those living on main highways regardless of the distance from the extension office.

Table 13.- Nature of roads as related to number of farms changing practices

Group	Number of farms	Percentage of all farms	Percentage of farms changing practices			Average number of practices changed
			Agri-cul-ture	Home Eco-nomics	Any prac-tice	
Improved roads----	810	57	59	27	65	3.4
Unimproved roads--	605	43	57	21	62	3.0

Membership in extension association. - With the farm bureau in the counties in which the areas studied were located, the farmers' organization cooperating with public agencies in the conduct of organized extension work, it would be natural to expect a close correlation between membership in this association and the adoption of improved practices. This correlation is brought out in Table 14. Eighty-four per cent of the farm-bureau members reported the adoption of agricultural practices taught by the extension service as compared to 73 per cent of the former farm-bureau members and 40 per cent of the nonmembers. The average number of all practices changed per farm was also nearly twice as great in the case of members as in the case of nonmembers.

Table 14. - Relation of membership in farm bureau to number of farms changing practices

Group	Number of farms	Percent-age of all farms	Percentage of farms changing practices			Average number of practices changed
			Agri-cul-ture	Home Eco-nomics	Any prac-tice	
Members of farm bureau	407	29	84	44	88	4.3
Former members-----	226	16	73	30	77	3.1
Nonmembers-----	782	55	40	13	47	2.3

With membership in the farm-home department of the farm bureau, this relationship is even more striking. (Table 15.) Eighty-two per cent of the members and 57 per cent of the former members adopted home practices as contrasted with only 9 per cent of the nonmembers. The members changed on the average 5.3 practices of all kinds as compared to 2.4 for the nonmembers. While the influence of membership in the extension organization upon effective extension work is apparent, it is equally apparent that a large proportion of the nonmembers have also been reached.

Table 15. - Relation of membership in home department to number of homes changing practices

Group	Number of homes	Percentage of all homes	Percentage of homes changing practices			Average number of practices changed
			Agriculture	Home Economics	Any practice	
Members home department	262	19	79	82	97	5.3
Former members-----	42	3	76	57	83	3.8
Nonmembers-----	1,111	78	52	9	55	2.4

When the farms reporting changed practices are sorted from those not adopting improved practices (table 16) one finds that in the case of the farms changing practices, 40 per cent were members of the farm bureau and 28 per cent members of the farm-home department, whereas in the case of the farms where no practices had been changed only 9 per cent were members of the farm bureau and 2 per cent members of the farm-home department. Apparently continued membership in the extension association is closely related to effective extension work.

Table 16. - Relation of practices changed to membership in extension association

Group	Number of farms	Percentage of all farms	Percentage members of	
			Farm bureau	Home department
Practices changed -----	902	64	40	28
No practices changed ----	513	36	9	2

Participation in extension. - The conducting of a demonstration, the holding of a field meeting, the meeting of a home-demonstration group or some similar activity of the extension service was reported on 14 per cent of the farms studied. (Table 17.) An additional 51 per cent of the farms had been represented at activities on neighboring farms or at community centers. The remaining 35 per cent of farms had never been represented at any extension activity in so far as could be remembered. Ninety-eight per cent of the farms in the first group, 83 per cent of the farms in the second group, and 23 per cent of the farms in the third group reported the adoption of changed practices.

Table 17. - Participation in extension activities as bearing on farms changing practices

Group	Number of farms	Percentage of all farms	Percentage farms changing practices			Average number of practices changed
			Agriculture	Home Economics	Any practice	
Farms having extension activities on farms or in homes-----	196	14	93	60	98	5.2
Other farms participating in extension activities	721	51	74	30	83	2.9
Farms not participating in extension activities	498	35	21	3	23	1.5

The average number of practices changed per farm in the first group was 5.2 in the second group 2.9, and in the third group 1.5. While one's chances of being reached were several hundred per cent better if one attended extension activities, either on one's own farm, or in the community, it is interesting to note that approximately a fourth of the farms not visiting demonstrations or attending meetings had been effectively reached.

Contact with extension workers. - Representatives of 1,010 farms or 71 per cent of the 1,415 farms studied reported contact with some member of the extension service staff. Of this number, 84 per cent reported changed practices, (table 18) as contrasted to 13 per cent of those not enjoying such contacts. The farms making contacts with extension workers also adopted on the average nearly three times as many practices per farm as did the no contact group. Since large numbers of contacts are made at demonstration meetings and other extension activities, this tabulation naturally bears a close relationship to the preceding one on participation in extension activities.

Table 18. - Contacts with extension workers as related to farms changing practices

Group	Number of farms	Percentage of all farms	Percentage of farms changing practices			Average number of practices changed
			Agriculture	Home Economics	Any practice	
Contact with extension workers-----	1010	71	77	33	84	3.4
No contact-----	405	29	11	2	13	1.3

Membership, participation, and contact. - Where the farmer or the farm woman was a member of the extension association and had also attended an extension activity or gotten in touch with an extension agent, 89 per cent of the farms involved reported the adoption of new practices. (Table 19.) Where only one of the above conditions had been met, 69 per cent of the farms reported changed practices. Where none of the above conditions had been satisfied but 19 per cent of the farms changed practices. The average number of practices changed per farm in the first group was 3.9, for the second group 2.2 and for the third group 1.2. The importance of the individual putting forth some effort to get in touch with the extension service, either by affiliation with the extension association, participation in extension activities, or by personal contact with extension workers is clearly brought out by this tabulation.

Table 19. - Relation of membership in extension association and participation in extension activities or contact with extension workers to number of farms changing practices

Group	Number of farms	Percentage of all farms	Percentage of farms changing practices			Average number practices changed
			Agri-culture	Home Eco-nomics	Any prac-tice	
<u>A</u> Farms satisfying both of the following conditions: (1) Membership in farm bureau of home department - present or past. (2) Participation in extension activities or contact with extension workers.	637	45	81	45	89	3.9
<u>B</u> Farms satisfying but one of the above conditions-----	435	31	63	12	69	2.2
<u>C</u> Farms satisfying none of the above conditions-----	343	24	9	2	10	1.2

Attitude Toward Extension

A record was made of the attitude of the farmers and farmers' wives interviewed, toward extension work. Seventy per cent were reported as favorable, 25 per cent as luke warm or indifferent, and 4 per cent opposed. No record of attitude was made in the case of the remaining 1 per cent of farms. (Table 20.)

Of the 60 farms actively opposed to extension work, 6 were members of the farm bureau, 15 more were formerly members, 33 had participated in extension activities and 35 had been in touch with extension agents. Twenty-two farms reported having changed practices. The relationship of status of membership in the extension association to attitude is interesting. One and five-tenths per cent of the farm-bureau members, 7 per cent of the former members, and 5 per cent of the nonmembers were reported opposed to extension work.

The percentage of farms actually opposed to extension work is comparatively small, only one farm out of 25 as compared to 7 farms out of 10 favorable. The fact that 25 per cent of the farmers are not interested in the work is of concern to extension people.

Table 20. - Attitude toward extension

Group	Entire area		Stanislaus		Butte	
	Number	Percent- age	Number	Percent- age	Number	Percent- age
Farm and home records obtained-	1,415	100	749	100	666	100
Reported: Favorable-----	988	70	471	63	517	78
Indifferent-----	349	25	225	30	124	19
Opposed-----	60	4	37	5	23	3
No attitude recorded	18	1	16	2	2	-

Causes of Withdrawn Membership in Extension Association

The reasons for withdrawal of membership given by the 226 former members of the farm bureau and the 42 former members of the home department are listed in Table 21. Increase in the amount of the annual membership fee, no direct benefits accruing to members over nonmembers, waning interest, and dissatisfaction with the management or policies of the association were the outstanding reasons given for withdrawal from the farm bureau. Inability to attend meetings and lost interest were the chief reasons given for withdrawal from the home department.

Table 21. - Percentage of former farm-bureau members dropping out for various reasons

Reasons	Farm bureau		Home bureau	
	Number	Percentage	Number	Percentage
Increased dues-----	39	17.3	--	--
No benefits-----	31	13.8	2	4.8
Lost interest-----	30	13.3	3	7.1
Disgruntled-----	23	10.3	2	4.8
Unable to attend-----	20	8.8	4	9.5
Not solicited-----	17	7.5	1	2.4
No meetings-----	15	6.7	1	2.4
Too busy-----	11	4.8	2	4.8
Neglect-----	10	4.4	--	--
Farm bureau dead-----	4	1.8	--	--
Policy-----	3	1.3	--	--
Discouraged-----	1	.4	--	--
Too old-----	1	.4	--	--
Dancing-----	1	.4	--	--
Moved-----	1	.4	--	--
No reason given-----	19	8.4	27	64.2
TOTALS-----	226	100.0	42	100.0

Nonmembers Free to Attend Meetings

Of the 1,008 former and nonmembers of the extension association, 749 furnished information as to whether or not they felt free to attend extension meetings. Only 18 or only slightly more than 2 per cent indicated hesitancy to attend extension activities due to not being members of the farmers' association cooperating with the State extension service. This is further indication that rural people realize the public nature of extension work.

Summary

The study includes 1,415 farms or 89 per cent of all the farms located in typical areas of Stanislaus and Butte Counties, California.

On 64 per cent of the farms, or in the case of more than 3 farms out of 5, improved farm or home practices had been adopted as the result of extension teaching.

A total of 2,921 practices were adopted. This is an average of 3.2 practices per farm reached.

Propaganda methods were reported as having influenced the adoption of improved practices on 83 per cent of the farms reached, object lesson methods on 80 per cent of the farms, personal service on 32 per cent, and indirect influences on 20 per cent of the farms.

Of the 2,921 practices adopted, 73 per cent were influenced by adult demonstrations, 72 per cent by meetings, and 12 per cent by farm visits. The less direct methods such as bulletins, news service, circular letters, and the like were mentioned in connection with only a small percentage of the practices changed, largely due, no doubt, to the fact that greatest emphasis has been placed upon the more direct methods by California extension workers.

Sixty-eight per cent of the farms operated by the owners reported changed practices as compared to 37 per cent of the farms operated by tenants indicating that condition of land occupancy is an important consideration in the effective conduct of extension work in the counties involved in this study.

Size of farm, distance from the extension office, and nature of roads are factors of little importance in the spread of improved practices. Large or small farms, nearby or at a distance from the extension office, located on main highways or on back roads are all being reached by the extension service with nearly the same degree of effectiveness.

Proportionately nearly twice as many members of the extension association were reached nearly twice as intensively as was true of nonmembers. The fact that nearly 50 per cent of the nonmembers of the extension association have put into practice the things taught by the extension service indicates, however, that extension is largely regarded as a public agency.

Continued membership in the extension association is quite dependent upon effective extension work.

Approximately four times as many of those visiting demonstrations and attending meetings as of those not participating in extension activities reported changed practices. Those participating in extension activities also were reached more than three times as intensively. Six times as many of the farmers and farm women in touch with extension workers were reached as of those not enjoying such contact.

Ten per cent of the farmers and home makers who had never made an effort to get in touch with extension agents, had never attended an extension meeting, or seen a demonstration and who were not affiliated with the extension association, had accepted improved practices introduced by the extension service.

Seven farmers out of every ten were reported actively favorable to extension work, one out of four not particularly interested and only one out of 25 opposed to the work.

The chief reasons given for withdrawal of membership in the extension association were increased annual dues, no direct benefits not enjoyed by nonmembers, lost interest, and dissatisfaction with the management of the local association.

Gratifying as is the progress of extension work brought out by this study, the study also reveals the enormous task ahead of extension workers in reaching more farms and homes and in changing more practices.

